CLAIM AMENDMENTS

1.-28. (Cancelled)

29. (Currently Amended) An imager comprising:

an array of pixel sensors, each pixel sensor to provide an analog signal indicative of a pixel of an image having different primary color components;

for each pixel sensor, at least two storage locations located in the array and each storage location being designated for a different one of the primary color components; ~~and~~

for each pixel sensor, a sample and hold circuit and an analog-to-digital converter, the sample and hold circuit to integrate the analog signal to generate an analog integrated signal and the analog-to-digital converter to covert the analog integrated signal into a digital signal; and

for each pixel sensor, switches to, during a first integration interval associated with one of the primary color components, store the digital signal in one of the storage locations and, during a second integration interval associated with another one of the primary color components, store the digital signal in another one of the storage locations.

30. (Previously Presented) The imager of claim 29, further comprising:

switches to multiplex signals from the storage locations onto an output terminal of the imager.

31. (Cancelled)

32. (Previously Presented) The imager of claim 29, wherein said at least two storage locations comprise at least three storage locations for each pixel sensor.

33. (Currently Amended) A method comprising:

providing a pixel sensor to provide an analog signal;

providing at least two digital storage locations associated with the pixel sensor and each digital storage location being designated for a different primary color component of an image;

~~during a first integration interval,~~ integrating the analog signal in a sample and hold circuit to generate a first analog integrated signal, sampling the first analog integrated signal to generate a first sampled integrated signal, converting the ~~analog~~ first sampled integrated signal into a first digital signal, and storing the first digital signal in one of the associated storage locations; and

~~during a second integration interval,~~ integrating the analog signal in the sample and hold circuit to generate a second analog integrated signal, sampling the second analog integrated signal to generate a second sampled integrated signal, converting the second sampled integrated signal into a second digital signal, and storing the second digital signal in another one of the storage locations.

34. (Currently Amended) The method of claim 33, wherein

the first digital signal indicates a first primary color component of the image during the first integration interval; and

the second digital signal indicates another primary color component different from the first primary color component of the image during the second integration interval.

35. (Previously Presented) The method of claim 33, further comprising:

forming a pixel sensor array that includes the pixel sensor.

36. (Currently Amended) A camera comprising:

an array of pixel sensors, each pixel sensor to provide an analog signal indicative of a pixel of an image having different primary color components;

for each pixel sensor, at least two storage locations located in the array and each storage location being designated for a different one of the primary color components;

for each pixel sensor, a sample and hold circuit and an analog-to-digital converter, the sample and hold circuit to integrate the analog signal to generate an analog integrated

signal and the analog-to-digital converter to covert the analog integrated signal into a digital signal; and

for each pixel sensor, switches to, during a first integration interval associated with one of the primary color components, store the digital signal in one of the storage locations and, during a second integration interval associated with another one of the primary color components, store the digital signal in another one of the storage locations;

a scaling unit to selectively scale data stored in said at least two storage locations.

37. (Previously Presented) The camera of claim 36, further comprising:

switches to multiplex signals from the storage locations onto an output terminal of the imager.

38. (Cancelled)

39. (Previously Presented) The camera of claim 36, wherein said at least two storage locations comprise at least three storage locations for each pixel sensor.

40. (Currently Amended) The camera of claim 36, further comprising:

a serial bus interface to communicate data stored in said at least two storage locations to a computer.